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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/810,209

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Yehiel Gotkis

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12/01/2006

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EXAMINER

ALANKO, ANITA KAREN

ART UNIT

PAPER NUMBER

1765

DATE MAILED: 12/01/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/810,209

Applicant(s)

GOTKIS, YEHIEL

Examiner

Anita K. Alanko

Art Unit

1765

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10/23/06 - amdt & 7/10/06 - RCE.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4, 6-13, 19-25, 29, 30, 42 and 43 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4, 6-13, 19-25, 29, 30, 42 and 43 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 10/23/06 (claims are duplicate of the amendment filed on 7/10/06 with the RCE) has been entered.

Specification

The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required: although shown in the figures, the specification lacks explicit basis for the new claim language of "greater than one full rotation over the surface of the substrate."

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-4, 6-13, 19-25, 29-30, 42-43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sarfaty et al (US 6,608,495 B2) in view of Abraham (US 2003/0193666 A1) and Caton et al (US 2005/0046874A1).

Sarfaty discloses a method comprising:

spinning substrate 150 having a film 151 (Fig.4, col.4, lines 15-17);

scanning an optical sensor 140 and an inductive sensor 120 across a path along a surface of the substrate (col.4, lines 20-36);

sensing properties of the film with the optical and inductive sensors at a plurality of points along the path (col.3, lines 36-39, 50-60).

As to amended claim 1, Sarfaty fails to disclose a spiral path. Abraham teaches that sensing over a spiral path is useful for mapping the quality of semiconductor components [0011]. Abraham teaches the "record player principle" which would be obvious to include more than one full rotation over the surface of the substrate since record players use spirals with more than one turn. Sarfaty also teaches that the arm is displaced relative to the rotating surface (col.4, lines 15-23), which may include a spiral, but not necessarily. Sarfaty further teaches that the manner of operation of the apparatus is "deemed readily apparent and obvious to one skilled in the art" (col.4, lines 63-65). Thus, it would have been obvious to one with ordinary skill in the art scan over a path establishing a spiral having greater than one full rotation over the surface of the substrate in the method of Sarfaty because Abraham teaches that spiral paths are useful to ensure quality, and a more accurate picture of the surface would be gleaned by having a longer spiral path compared to a short spiral path.

Sarfaty fails to disclose to generate a map. Caton teaches that it is useful to generate a map of a film (a graphical image, [0070]-[0071]) using information from the plurality of points ([0045], Fig.5) along the path from an optical 140 and inductive sensor 132 ([0032]) representing a thickness profile ([0033]). It would have been obvious to one with ordinary skill in the art to

generate and graphically display a map of the film in the method of Sarfaty because Caton teaches that this is useful for improved product consistency, verification of product quality and to reduce costs of manufacture.

As to claim 11, Caton teaches that data that the controller 422 receives from the measurements may be couples to an external processor 440, such as a computer ([0074]). Although Caton does not explicitly cite averaging of two or more sensed properties, averaging is a useful, conventional technique for statistical analysis, for example as used by a computer. For example, averaging is useful to remove noise from the graphical image. It would have been obvious to one with ordinary skill in the art to average as cited in the modified method of Sarfaty because it is conventional and in order to optimize the graphical representation to be of a useful format.

Response to Amendment

The 112 rejection is withdrawn since the term “substantially” has been deleted.

The rejection over David is withdrawn. Applicant’s point is well taken that David does not suggest a spiral path having greater than one full rotation over the surface of the substrate. The claims are now rejected over David in combination with newly cited Abraham.

Response to Arguments

Applicant's arguments filed 10/23/06 have been fully considered but they are not persuasive, to the extent they still apply. Applicant argues that Sarfaty does not teach sensing during movement. In response, the claims do not cite sensing during movement. Abraham is

newly cited to teach a spiral path. The map is obvious as taught by Caton in order to generate an accurate map of the complete surface for high quality, as desired by Abraham.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anita K. Alanko whose telephone number is 571-272-1458. The examiner can normally be reached on Mon-Fri until 2:30 pm (Wed until 11:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nadine Norton can be reached on 571-272-1465. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Anita K. Alanko
Anita K Alanko
Primary Examiner
Art Unit 1765